OPERATING INSTRUCTIONS

METROLOGY GROUP

TYPE 1203-B

UNIT POWER SUPPLY

A
GR
UNIT
INSTRUMENT

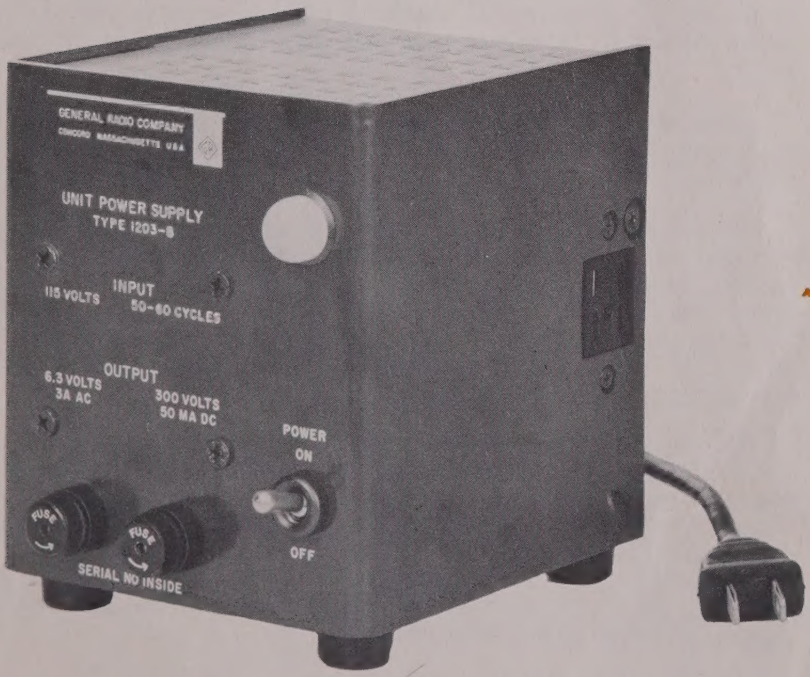

Figure 1. Type 1203-B Unit Power Supply.

TYPE 1203-B UNIT POWER SUPPLY

1 INTRODUCTION

1.1 PURPOSE. The Type 1203-B Unit Power Supply (Figure 1) is designed to provide a source of a-c heater and d-c plate power for other Unit Instruments. It can also supply equipment not of the Unit line, by means of a mating connector provided.

1.2 DESCRIPTION. The Type 1203-B is housed in a standard Unit-type case. On the front panel are the on-off switch, indicator light, and fuse holders. The output connector is on the right-hand side, the input cord and plug on the left-hand side.

2 OPERATING CHARACTERISTICS. The Type 1203-B Unit Power Supply uses a 6X4 full-wave rectifier to provide about 300 volts dc at a maximum load of 50 milliamperes. With no load the output is about 380 volts dc. A 6.3-volt a-c heater supply is also provided. If the a-c load is limited to 1.5 amperes, as much as 65 milliamperes may be drawn (about 285 volts). Ripple is less than 80 millivolts ac at 300 volts, 50 ma dc.

Both the 6.3-volt a-c and 300-volt d-c supplies are isolated from ground and from each other to permit greater latitude in external connections.

3 INSTALLATION. All Unit Instruments requiring external power are equipped with multipoint connectors that fit the Type 1203-B output connector. On some Unit Instruments this connector is on a cable; on many others, the connector is mounted on the side of the cabinet. In the latter instances, the Unit Power Supply can be permanently and firmly attached to the Unit Instrument by means of the locking strips supplied with the Unit Instrument for this purpose.

If power is to be furnished to an instrument not of the Unit type, use the mating connector supplied. Connect leads to the mating connector to match the appropriate terminals on the output socket, as indicated in Figure 2. (Terminal No. 15 of the mating connector connects to Terminal No. 15 of the output socket, etc.)

4 OPERATION. The on-off panel switch is the only control. To turn power on, place this switch in the upper position. The indicator lamp should light when power is turned on.

5 SERVICE AND MAINTENANCE.

5.1 GENERAL. Major service problems should be referred to our Service Department, which will cooperate as much as possible by furnishing

information and instructions as well as by supplying any replacement parts needed.

When notifying our Service Department of any difficulties in operation or service, specify the serial and type numbers of the instrument. (The serial number is stamped on the inside of the instrument.) Also give a complete report of trouble encountered and steps taken to eliminate the trouble.

Before returning an instrument or part for repair, please write to our Service Department, requesting a Returned Material Tag, which includes shipping instructions. Use of this tag will insure proper handling and identification. A purchase order covering repair of material returned should also be forwarded to avoid any unnecessary delay.

5.2 FUSES. The Type 1203-B Unit Power Supply uses two 0.6-ampere Slo-Blo fuses, accessible for replacement at the front panel.

SPECIFICATIONS

Output (at 115-v input):	300 v dc (±5%) at 50 ma 6.3 v ac at 3 amp (with a-c load at 1.5 amp or less, max d-c load is 65 ma, about 285 v dc.)
Regulation:	At no load, d-c output is 380 v.
Ripple:	Less than 80 mv (120 cps) at full load.
Input:	105-125 v, 50-60 cps, 50 w full load at 115 v.
Connectors:	Line cord permanently attached to instrument. Standard 4-point connector mounted on cabinet side for other Unit Instruments.
Accessories Supplied:	Mating plug for equipment other than Unit Instruments.
Housing:	Charcoal-gray enamel-finish aluminum panel and sides. Aluminum cover finished in clear lacquer.
Dimensions:	Width 5 in., height 5-3/4 in., depth 6-1/4 in. over-all, not including power cord.
Weight:	5 lb.

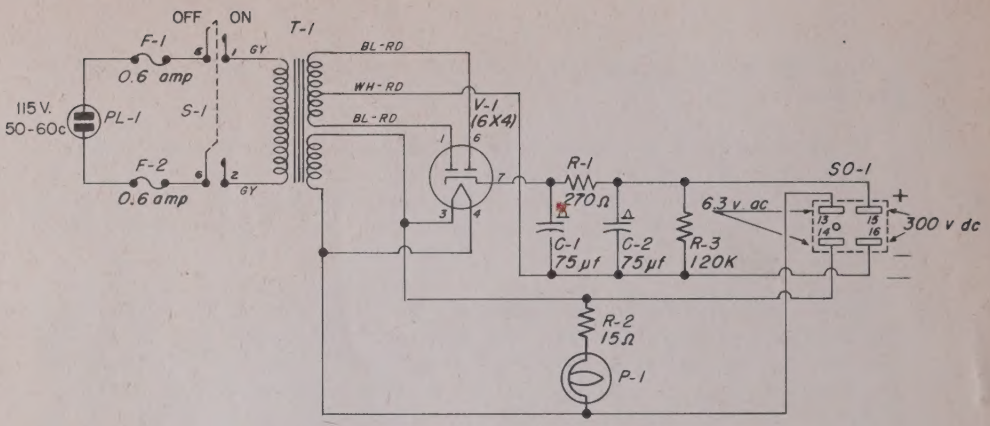

Figure 2. Schematic Diagram.

PARTS LIST

REF DES	DESCRIPTION	GR NO.
C1	CAPACITOR, Electrolytic block, 75μf, 450dcwv	COEB-38
C2	CAPACITOR, Electrolytic block, 75μf, 450dcwv	
F1	FUSE, 0.6-amp Slo-Blo Type 3AG	FUF-1
F2	FUSE, 0.6-amp Slo-Blo Type 3AG	FUF-1
P1	PILOT LIGHT, 6.3v, Mazda Type 44	2LAP-939
PL1	PLUG	Part of CAP-1-2
R1	RESISTOR, Fixed composition, 270Ω±10%, 2w	REC-41BF
R2	RESISTOR, Fixed wire-wound, 15Ω±10%, 1/2w	REW-3C
R3	RESISTOR, Fixed composition, 120k±10%, 2w	REC-41BF
S1	SWITCH, dpst	SWT-333
SO1	SOCKET	CDMS-5-4
T1	TRANSFORMER	485-473-2

G E N E R A L R A D I O C O M P A N Y

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